



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,593	04/06/2001	Jari Pekka Hamalainen	460-006859-US (C01)	3070
2512	7590	12/30/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			SON, LINH L D	
			ART UNIT	PAPER NUMBER
			2135	
DATE MAILED: 12/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/827,593	HAMALAINEN ET AL.	
	Examiner	Art Unit	
	Linh LD Son	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-98 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responding to the Amendment received on 09/26/2005.
2. Claims 19-98 are pending.

Response to Arguments

3. Applicant's arguments, see Amendment, filed 09/26/05, with respect to the rejection(s) of claim(s) 19-25, 27-29, 32-34, 48, 60-65, 67-69, 71-73, 77-79, 81-85, 87, 90-91, and 93-98 under 35 U.S.C. 102(b), and Claims 26, 30-31, 35-41, 42-47, 49-59, 66, 70, 74-76, 80, 86, 88-89, and 92 under U.S.C. 103(a), have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Talbot, Lewis, Billstrom, Serbetciouglu, Kniffin, and Kennedy.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2135

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 19-23, 27-29, 48,59, 60-65, 67-69, 71-73, 77-79, 81-85, 87, 90-91, and 93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Talbot, US Patent No. 4411017.

6. As per claims 19, 48, 59, 65, 71, and 82:

Talbot discloses "A method for indicating a ciphering mode of data communication between a mobile communication network and a mobile station in the mobile communication network, the mobile communication network and the mobile station being capable of data communication in at least one enciphered mode of communication and in at least one enciphered mode of communication" in (Col 3 lines 22-45), "comprising the steps of: in a situation where an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station, sending from the mobile communication network to the mobile station a cipher mode control signal to indicate that an enciphered mode of communication is to be used" in (Col 3 line 60 to Col 4 line 12); "monitoring at the mobile station signals sent from the mobile communication network to the mobile station; and if monitored signals comprise a cipher mode control signal, indicating that an enciphered mode of data communication is to be used in communication between the mobile communication network and the mobile station" in (Col 3 line 60 to Col 4 line 12, and Col 9 lines 30-55).

7. As per claims 20, 60, and 83:

Talbot discloses "A method according to claims 19, 59, and 82 further comprising the step of causing the mobile station to enter an enciphered mode of communication if said monitored signals comprise a cipher mode control signal" in (Col 3 line 60 to Col 4 line 12).

8. As per claims 21 and 61:

Talbot discloses "A method according to claims 19 and 59, further comprising the step of indicating that an unciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station if said monitored signals do not comprise a cipher mode control signal" in (Col 3 line 57 to Col 4 lines 30, and Col 10 line 65 to Col 11 line 10).

9. As per claims 22 and 62:

Talbot discloses "A method according to claims 19 and 59, wherein a ciphering mode to be used in data communication between the mobile communication network and the mobile station is specified by an operator of the mobile communication network" in (Col 10 lines 9-30).

10. As per claims 23, and 63-64:

Talbot discloses "A method according to claims 19, 59, and 63, wherein a ciphering mode to be used in data communication between the mobile communication network and the mobile station is determined during establishment of data communication

Art Unit: 2135

between the mobile communication network and the mobile station” in (Col 10 lines 9-30).

11. As per claim 27:

Talbot discloses “A method according to claim 19, further comprising the steps of: maintaining a cipher mode indication data field in the mobile station; initially setting said cipher mode indication data field into a first state indicative that an enciphered mode of communication is to be used in data communication between the communication network and the mobile station; and in a situation in which said monitored signals comprise a cipher mode control signal, updating the state of the cipher mode indication data field into a second state indicative that an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station” in (Col 3 line 57 to Col 4 lines 30, and Col 10 line 65 to Col 11 line 10).

12. As per claims 28 and 68:

Talbot discloses “A method according to claims 19 and 59, wherein in addition to indicating a ciphering mode, a change in ciphering mode is indicated” in (Col 3 line 57 to Col 4 lines 30, Col 9 lines 30-48, and Col 10 line 65 to Col 11 line 10).

13. As per claim 29:

Talbot discloses “A method according to claim 19, wherein data communication between the mobile communication network and the mobile station takes place at least in part over a radio link” in (Col 1 lines 5-13).

14. As per claim 65:

Talbot teaches “An apparatus according to claim 59, further comprising: means for maintaining a cipher mode indication data field; means for setting said cipher mode indication data field initially into a first state indicative that an un-ciphered mode of communication is to be used in data communication between the communication network and the mobile station” in (Col 3 line 60 to Col 4 line 12); “and means responsive to said determining means for changing the state of the cipher mode indication data field into a second state indicative that an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station, if said monitored signals comprise a cipher mode control signal” in (Col 3 line 60 to Col 4 line 12).

15. As per claims 72-73:

Talbot discloses “An apparatus according to claims 59 and 68, wherein said means for indicating a ciphering mode are provided in a data processor external to the mobile station and communicating with the mobile station” in (Col 3 line 60 to Col 4 line 12).

16. As per claims 77, 79, 81, 87, and 93:

Talbot discloses “An apparatus according to claims 76, 78, 80, 86, and 92, further comprising a cipher mode indicator, the user interface block being arranged to control the cipher mode indicator according to said indication” in (Col 3 line 60 to Col 4 line 12).

17. As per claims 78, 90, and 91:

Talbot discloses "An apparatus according to claims 74, 86, and 90, further comprising a user interface block, wherein the cipher indication memory block provides an indication of the state of said cipher mode indication data field to the user interface block when the state of said cipher mode indication data field is changed" in (Col 3 line 60 to Col 4 line 12).

18. As per claim 84:

Talbot discloses "A mobile station according to claim 82, further comprising means responsive to said determining means for indicating that an un-ciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station, if said monitored signals do not comprise a cipher mode control signal" in (Col 3 line 60 to Col 4 line 12).

19. As per claims 85 and 94:

Talbot teaches "A system for indicating a ciphering mode of data communication between a mobile communication network and a mobile station in the mobile communication network, the mobile communication network and the mobile station being capable of data communication in at least one enciphered mode of communication and at least one un-ciphered mode of communication" in (Col 3 line 60 to Col 4 line 12), the system comprising: means in the mobile communication network for determining whether an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station

Art Unit: 2135

according to a setting of the mobile communication network (Col 3 line 60 to Col 4 line 12, and Col 4 lines 58-68); means in the mobile communication network for sending a cipher mode control signal from the mobile communication network to the mobile station in a situation where an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station (Col 3 line 60 to Col 4 line 12); means in the mobile station for monitoring signals sent from the mobile communication network to the mobile station; means in the mobile station for determining if monitored signals comprise a cipher mode control signal; and means responsive to said determining means for indicating that an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station, if said monitored signals comprise a cipher- mode control signal (Col 3 line 60 to Col 4 line 12).

20. As per claim 95:

Talbot teaches "A system according to claim 94, further comprising means in the mobile station for causing the mobile station to enter an enciphered mode of communication if said monitored signals comprise a cipher mode control signal" in (Col 3 line 60 to Col 4 line 12).

21. As per claim 96:

Talbot teaches "A system according to claim 94, further comprising means responsive to said determining means for indicating that an unciphered mode of communication is to be used in data communication between the mobile communication network and the

Art Unit: 2135

mobile station, if said monitored signals do not comprise a cipher mode control signal” in (Col 3 line 60 to Col 4 line 12, Col 6 lines 1-12).

22. As per claim 97:

Talbot teaches “A data processor external to a mobile station and capable of use with the mobile station for data communication between the external data processor and a mobile communication network via the mobile station, the mobile communication network and the mobile station being capable of data communication in at least one enciphered mode of communication and in at least one unciphered mode of communication (Col 3 line 60 to Col 4 line 12), the external data processor comprising apparatus for receiving from the mobile station, information concerning a ciphering mode used in communication between the mobile station and the mobile communication network, and means responsive to information received from the mobile station for indicating a ciphering mode used in communication between the mobile station and the mobile communication network” in (Col 3 line 60 to Col 4 line 12).

23. As per claim 98:

Talbot discloses “A method for indicating a ciphering mode of data communication between a mobile communication network and a mobile station in the mobile communication network, the mobile communication network and the mobile station being capable of data communication in at least one enciphered mode of communication and in at least one unciphered mode of communication, and in a situation where an enciphered mode of communication is to be used in data

Art Unit: 2135

communication between the mobile communication network and the mobile station (Col 3 line 60 to Col 4 line 12), sending from the mobile communication network to the mobile station a cipher mode control signal to indicate that an enciphered mode of communication is to be used; the method comprising the steps of: monitoring at the mobile station signals sent from the mobile communication network to the mobile station; and if monitored signals comprise a cipher mode control signal, indicating that an enciphered mode of communication is to be used in data communication between the mobile communication network and the mobile station" in (Col 3 line 60 to Col 4 line 12).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 24-26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of Billstrom et al, US Patent No 5590133, hereinafter "Billstrom".

26. As per claims 24-25:

Talbot discloses "A method according to claims 19 and 24". However, Talbot does not disclose "wherein determination of the ciphering mode to be used in data communication prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure".

Nevertheless, Billstrom discloses the "Apparatuses and Mobile stations for providing packet data communication in digital TDMA Cellular Systems" invention, which teaches "the determination of the ciphering mode to be used in data communication prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure" in (Col 9 lines 20-50, and Col 10 lines 45-61). Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate Billstrom's invention with Talbot ciphering mode teaching to be mobilized with security.

27. As per claim 26:

Talbot discloses "A method according to claim 19, wherein a ciphering mode to be used in data communication between the mobile communication network and the mobile station is determined during a initiation process (Col 3 line 60 to Col 4 line 12).

However, Talbot is silent on a ciphering mode to be used in data communication between the mobile communication network and the mobile station is determined during a communication handover procedure that occurs when the mobile station moves between a first part of the mobile communication network and a second part of the mobile communication network". Nevertheless, Billstrom discloses the "Apparatuses and Mobile stations for providing packet data communication in digital TDMA Cellular Systems" invention, which teaches a method of negotiating a cipher mode during a handover process (Col 8 lines 46 to Col 9 line 20, and Col 9 lines 20 to 67). Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate Billstrom's invention with Talbot cipher mode indication and the user select capability in the handover process to provide options to authenticate and maintain a secure communication connection at the user consent inter-connection network.

28. As per claim 30:

Talbot teaches a method according to claim 19, wherein the mobile communication network is a wireless network. However, Talbot is silent on the network is a GSM network. Nevertheless, Billstrom does teach a ciphering mode to mobile communication over a GSM network (Col 6 line 15). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Talbot's invention to implement in GSM network for better coverage and mobility.

Art Unit: 2135

29. Claims 31-34, 66-67, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of Lewis et al, US Patent No. 6192255, hereinafter "Lewis".

30. As per claims 31 and 66:

Talbot discloses "A method according to claims 19 and 59. However, Talbot does not mention that "the mobile station comprises a display unit and the ciphering mode used in data communication between the mobile communication network, and the mobile station is indicated by the display unit". Nevertheless, Lewis discloses the "Communication System and Methods for Enhanced Information Transfer" invention, which includes the display unit in (Col 19 lines 50-57, and Col 20 lines 10-15).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate this feature to display the information for alerting the user.

31. As per claims 32 and 67:

Talbot discloses "A method according to claim 19". However, Talbot does not disclose, "the mobile station comprises a light source and the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the light source". Nevertheless, Lewis discloses "the mobile station comprises a light source and the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the light source" in (Col 20 lines 10-15, and Col 16 lines 40-67). Therefore, it would have been

obvious at the time of the invention was made for one having ordinary skill in the art to incorporate this feature to display the information for alerting the user.

32. As per claims 33 and 69:

Talbot discloses "A method according to claims 28 and 68". However, Talbot does not disclose, "the mobile station comprises a display unit and an acoustic signal forming element, the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the display unit, and a change in ciphering mode is indicated with the acoustic signal forming element".

Nevertheless, Lewis discloses "the mobile station comprises a display unit and an acoustic signal forming element, the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the display unit, and a change in ciphering mode is indicated with the acoustic signal forming element" in (Col 10 lines 53-67, Col 20 lines 10-15, and Col 16 lines 40-67)

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate this feature to display the information for alerting the user.

33. As per claim 34:

Talbot and Lewis discloses "A method according to claim 32". However, Talbot does not disclose, "A change in ciphering mode is indicated with a flashing light".

Nevertheless, Lewis discloses "A change in ciphering mode is indicated with a flashing light" in (Col 20 lines 10-15, and Col 16 lines 40-67).

Art Unit: 2135

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate this feature to display the information for alerting the user.

34. Claims 35, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of Kniffin et al, US Patent No. 6072402, hereinafter "Kniffin"

35. As per claims 35 and 70:

Talbot discloses "An apparatus characterized in that the means for indicating a change in the cipher mode by the flashing light and vibration. However, Talbot does not teach a change in the cipher mode causing to generate vibration. Nevertheless, Kniffin does discloses "Secure Entry System with Radio Communications" invention, which including a signaling means to alert the user, such as beeping, vibrating, or displaying in (Col 7 lines 10-15, and Col 10 lines 10-20). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate alert mechanism with Talbot's invention to sensing different event conveniently alert the user.

Art Unit: 2135

36. Claims 44-47 and 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of fSerbetciouglu et al, US Patent No. 5719918, hereinafter "Serbetciouglu", and further in view of Kniffin.

37. As per claims 44 and 46-47:

Talbot discloses "A method according to claim 19, wherein the mobile communication network and the mobile station are capable of a first type of communication and an indication of a cipher mode". However, Talbot is silent on "a second type of data communication, each of said first and said second types of data communication having an enciphered mode and an enciphered mode, wherein a ciphering mode of the second types of data communication is indicated". Nevertheless, Serbetciouglu does teach a second type of data ciphering mode communication (Col 9 lines 15-50). However, neither Talbot nor Sebetciouglu teaches a method of indicating the second type of ciphering mode. Nevertheless, Kniffin does teach a method of alert the user at different events (Col 7 lines 10-15, and Col 10 lines 10-2). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Talbot's invention with Serbetciouglu's invention to implement two types of data ciphering communication in a wireless network and incorporate Lewis's invention to monitor different events of power fluctuation to alert the user of an incoming communication type ciphering events.

38. As per claim 45:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claim 44, wherein the first type of data communication is a telephone call and said second type of data communication is a short message (SMS)" in (Serbetciouglu, Col 7 lines 10-15).

39. As per claim 55:

Talbot discloses "A method according to claim 19, wherein a mobile station is in data communication with a terminal in a fixed line communication network, and a ciphering mode between the fixed line communication network and the terminal in the fixed line communication network is indicated to a user of the mobile station" in (Col 3 line 60 to Col 4 line 12).

40. As per claim 56:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claim 55, wherein the mobile station sends an inquiry message to the terminal in the fixed line communication network to determine the ciphering mode used in communication between the fixed line communication network and said terminal" in (Col 3 line 60 to Col 4 line 12).

41. As per claim 57:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claim 56, wherein if the mobile station does not receive a response to said inquiry message, the mobile station indicates that the ciphering mode used in data communication is unknown" in (Col 4 lines 58-68).

42. As per claim 58:

Talbot, Serbetcioglu, and Kniffin disclose "A method according to claim 55, wherein if the mobile station receives a response to said inquiry message, but cannot interpret said response the mobile station indicates that the ciphering mode used in data communication is unknown" in (Col 4 lines 58-68).

43. Claims 36-40, 41-43, 74-76, 80, 86, 88-89, and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of Kennedy et al, European Patent No. 0680171A2, hereinafter "Kennedy".

44. As per claims 36 and 74:

Talbot, Serbetcioglu, and Kniffin disclose discloses "An apparatus according to claims 19, 59 and 86, wherein the resource management block is the actual user intervention control (Col 9 lines 30-48)". However, Talbot does not specifically teach "the apparatus comprises of: a radio resource management block and a cipher indication memory block, wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if said monitored signals comprise a cipher mode control signal are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set the cipher mode indication data field in said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network". Nevertheless, Kennedy discloses "the radio resource

management block (Col 3 lines 35-44, and Col 4 lines 8-13, Security System Controller) and a cipher indication memory block (also in the Security System Controller) wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if said monitored signals comprise a cipher mode control signal are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set the cipher mode indication data field in said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network (Col 4 line 5 to Col 5 line 28)". Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the features in Kennedy to Talbot's invention to electronically control the mode of the communication.

45. As per claims 37, 75, and 89:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claims 36, 74, and 88". However, Talbot does not teach "the said cipher indication memory block makes an interrupt request in response to a change in the cipher mode indication data field". Nevertheless, Kennedy does teach this feature in (Col 4 lines 8-13). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Talbot's invention to incorporate Kennedy's feature to electronically controller the mode of the communication.

46. As per claims 38, 41, 76, 88, and 92:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claims 37, 40, 75, 87, and 86, wherein the user interface block detects said interrupt request and sends an inquiry to the cipher indication memory block to inquire about the state of the cipher mode indication data field, and the cipher indication memory block returns an indication of the state of said cipher mode indication data field in response to said inquiry" in (Talbot, Col 9 lines 30-48).

47. As per claims 39, 40, and 43:

Talbot, Serbetciouglu, and Kniffin disclose "A method according to claims 36, 38, 42, 76, 78, 80, and 92, wherein the mobile station comprises a cipher mode indicator and the user interface block controls the cipher mode indicator according to said indication" in (Talbot, Col 9 lines 30-48).

48. As per claims 42, 80:

Talbot, Serbetciouglu, and Kniffin disclose "An apparatus according to claims 36 and 74, further comprising a user interface block, wherein the user interface block sends repeated inquiries to the cipher indication memory block about the state of the cipher mode indication data field, each inquiry being separated in time from the next by a predetermined interval and the cipher indication memory block returns an indication of

the state of the cipher mode indication data field in response to each inquiry” in (Talbot, Col 9 lines 30-48).

49. As per claim 86:

Claim 74 rejection basis is incorporated. Further, Kennedy teaches “the first state being indicative of an un-ciphered mode of communication to be used in data communication between the communication network and the mobile station” in (Col 9 lines 30-48).

50. Claims 49-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot in view of Kennedy, and further in view of Lewis et al, US Patent No. 5767778, hereinafter “Lewis”.

51. As per claim 49:

Talbot discloses “A method according to claim 19”. However, Talbot does not disclose “the mobile station is used in connection with a data processor external to the mobile station for data communication between the mobile communication network and the external data processor, the external data processor comprising a display unit, wherein a ciphering mode used in data communication between the mobile station and the mobile communication network is indicated on the display unit of the external data processor”. Nevertheless, Kennedy does teach a mobile station is used in connection with a data processor external to the mobile station, and the external data processor comprising a display unit (Figure 2, and Col 1 lines 1-5). The external data processor is

Art Unit: 2135

another mobile station in connection with the mobile station. The display unit is shown in Figure 9. However, Neither Talbot or Kennedy teaches the ciphering mode is indicated on the display. Nevertheless, Lewis does teach "the indication alert on the display of the ciphering mode" in (Col 19 lines 50-57, and Col 20 lines 10-15). The indication alert gets generated from the power fluctuation sensed by the sensor circuit. Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Talbot's invention to incorporate Kennedy's and Lewis's teaching to create a complete solution to electronically control the cipher communication and conveniently display the status of the communication for the user.

52. As per claim 50:

Claim 49 rejection basis is incorporated. Further, Lewis teaches "the external data processor further comprises an acoustic signal forming element and a change in ciphering mode used in data communication between the mobile station and the mobile communication network is indicated with the acoustic signal forming element of the external data processor" in (Col 5 lines 10-25).

53. As per claim 51:

The rejection basis of claim 49 is incorporated, wherein an indication of the state of the cipher mode indication data field is provided from the mobile station to the external data processor" in (Talbot, Col 3 line 60 to Col 4 line 12).

54. As per claim 52:

The rejection basis of claim 49 is incorporated, wherein the mobile station and the external data processor are connected by means of a connection bus" in (Fig 1, Col 3 line 60 to Col 4 line 12).

55. As per claims 53-54:

The rejection basis of claim 49 is incorporated. The mobile station comprises a cipher indication memory block which maintains a cipher mode indication data field indicative of a ciphering mode used in data communication between the mobile communication network and the mobile station, and the external data processor is provided with application software for monitoring the ciphering mode used in data communication between the mobile station and the mobile communication network, wherein the application software in said external data processor sends a cipher mode inquiry message to the mobile station to determine the state of the cipher mode indication data field maintained in said cipher indication memory block of the mobile station" in (Talbot, Col 3 line 60 to Col 4 line 12, and Col 9 lines 30-47).

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone


Art Unit: 2135

number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son
Examiner
Art Unit 2135


Linh LD Son